



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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San Francisco, CA 94105

October 27, 2016

Joelle Gore
Chief Stewardship Division
Office for Coastal Management
National Ocean Service, NOAA
1305 East West Highway, N/ORM2, Room 10622
Silver Spring, Maryland 20910

Subject: Draft Environmental Impact Statement for the He'eia National Estuarine Research Reserve
Draft EIS Project, Oahu, Hawai'i (CEQ# 20160197)

Dear Ms. Gore:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the He'eia National Estuarine Research Reserve Project, Oahu, Hawai'i, pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. These comments were also prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines promulgated at 40 CFR 230 under Section 404(b)(1) of the Clean Water Act (CWA).

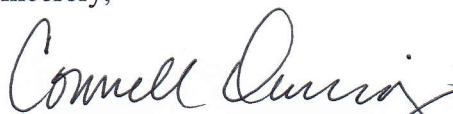
Based on our review, we have rated the Preferred Alternative as "Environmental Concerns – Insufficient Information" (EC-2) (see enclosed "Summary of Rating Definitions"). This rating is based primarily upon questions regarding impacts to aquatic resources and the need to more clearly describe how proposed management actions related to implementation of the National Estuarine Research Reserve (NERR) Management Plan will be integrated with other plans already being implemented in the watershed. These concerns are further described below and in the attached detailed comments.

EPA is concerned that the proposed actions, including the conversion of over 176 acres of wetlands into a working agricultural landscape (conversion to taro lo'i), may require a Clean Water Act Section 404 permit. EPA encourages NOAA to further coordinate with the U.S. Army Corps of Engineers to determine if the proposed project requires a Section 404 permit under the CWA. EPA is also concerned the Management Plan may not be aligned with water quality and habitat restoration goals of other plans already being implemented in the watershed. EPA recommends further inter-agency coordination to avoid potential overlap of regulatory actions and federal funding. Specifically, EPA recommends that NOAA more clearly identify how the proposed actions are consistent with the goals and objectives of the Hawai'i Department of Health Polluted Runoff Control Program and the Hawai'i Nonpoint Source Management Plan. EPA also recommends additional clarity in the Final Environmental Impact Statement (FEIS) regarding how certain proposed actions outlined in the DEIS, such as specific species restoration projects and water quality sampling, would be implemented.

EPA also encourages NOAA to include in the FEIS further discussion that analyzes climate change impacts, particularly how climate change would impact current wetlands in the project area vs. the proposed working agricultural taro landscape. For example, analyze the ability of both landscapes species/habitats to adapt to projected temperature, precipitation, and sea level changes.

EPA encourages NOAA to highlight how the NERR Draft Management Plan and EIS provide an opportunity to ensure continuity between NOAA, and the Hawai'i Department of Health Polluted Runoff Control Program. This would help ensure state and federal resources are leveraged for maximum improvement rather than potentially duplicative efforts. Thank you for the opportunity to review this DEIS. We appreciate NOAA's coordination with EPA during our review. When the FEIS is released, please send one hard copy and two CDs to the address above (mail code: ENF-4-2). If you have any questions, please contact me at (415) 947-4161, or have your staff contact James Munson, the lead reviewer for this project. James can be reached at (415) 972-3852 or Munson.James@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Connell Dunning". The signature is fluid and cursive, with the first name "Connell" being more prominent than the last name "Dunning".

Connell Dunning, Acting Manager
Environmental Review Section

Enclosures: Summary of EPA Rating Definitions
EPA's Detailed Comments

Cc:

Stephen Cayetano, Chief, United States Army Corps of Engineers

Alec Wong, State of Hawai'i Department of Health

Mike Burke, Hawai'i Pollutant Runoff Control Program

Christopher G. Chung, Hawai'i Coastal Zone Management Program, Office of Planning

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Clean Water Act, Section 404

The Draft Management Plan (Appendix A) for the National Estuarine Research Reserve Project describes activities proposed in 176 acres of wetlands, including conversion to working agricultural landscape or taro lo'i. This conversion may require a Clean Water Act (CWA) Section 404 permit. Page 197 of the Draft Environmental Impact Statement (DEIS) states the "US Army Corps of Engineers (USACE) has determined that a Section 404 permit was not necessary" for the proposed wetlands conversion; however, EPA notes that the DEIS references the USACE "Paepae o He'eia" Public Notice (PN), which is for repair of "80 feet" of the fishpond wall, not specifically for taro wetlands as the DEIS identifies. While there is a stipulation in the PN that the project would include some restoration of historic taro wetlands, no size reference or approval of conversion is identified.

Recommendations: We recommend NOAA work with the USACE to determine if a CWA Section 404 permit is needed for the activities described in DEIS, specifically, but not limited to, the conversion of wetlands to taro agriculture. In the Final Environmental Impact Statement (FEIS), update the CWA Section 404 section to reflect the outcome of this discussion and identify any additional mitigation that would be warranted.

In the event that the project is not covered by previous regulatory approvals, we recommend NOAA obtain all necessary permits prior to starting construction. Include in the FEIS a clear description of the required permits along with an anticipated schedule of when required permits and approvals will be completed.

In the event that a CWA Section 404 individual permit is required by the USACE, the Least Environmentally Damaging Practicable Alternative (LEDPA) must be identified and an alternatives analysis will need to be completed in order to comply with CWA Section 404(b)(1) Guidelines. The alternatives analysis would need to include a reasonable range of practicable alternatives, including an expanded alternatives analysis that would contain offsite alternatives. Specifically, the location of other agriculture taro cultivation opportunities that don't require conversion of 176 acres of wetlands and all viable offsite alternatives would need to be considered within the range of practicable alternatives. EPA recommends that these considerations and required analysis for CWA Section 404 permitting occur prior to release of the FEIS.

Clean Water Act, Section 303(d)

The DEIS accurately identifies that Hawai'i Department of Health (HDOH) has determined the He'eia stream water quality is impaired by sediment, total suspended solids (TSS), and nutrients pursuant to Section 303(d) of the Clean Water Act. However, the DEIS does not provide sufficient information to determine if the projects in the Draft Management Plan would control or contribute to these pollutants of concern. For example, depending on the type of agricultural practices followed, there could be an increase in nutrients and or sediment. While the USACE PN states that "nutrient-rich fresh water" created by this taro wetland reintegration is beneficial, it is possible such actions would exacerbate the nutrient loads of the stream.

Recommendations: We recommend the FEIS describe the anticipated impacts to water quality pollutants of concern anticipated from the management plan actions and associated activities in the National Estuarine Research Reserve (NERR). EPA recommends referencing the listed

pollutants identified on the CWA Section 303(d) list, which can be found on the following website: <http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/integrated-report-and-total-maximum-daily-loads/>. Consider water quality impacts of the proposed project in relationship to other efforts in the watershed, including nutrient and sediment reduction efforts to meet water quality standards. Discuss if nutrient loads in streams would be exacerbated by taro reintegration and commit to specific mitigation actions to reduce such impacts.

Clean Water Act, Section 319

EPA provides approximately \$1.2 million per year of Clean Water Act Section 319 (Nonpoint Source Program) to the HDOH Polluted Runoff Control (PRC) Program to implement the Hawai'i Nonpoint Source Management Plan. There is a potential for duplication of federal funding investments from the project as proposed in the DEIS. The PRC Program includes statewide programs such as development and implementation of the Coastal Nonpoint Pollution Control Program pursuant to the Coastal Zone Act Reauthorization Amendments (CZARA), Section 6217, in partnership with the Coastal Zone Management Program (Office of Planning). The PRC Program also invests implementation of watershed plans to restore water quality to impaired watersheds. Specifically, the Hawai'i Nonpoint Source Management Plan 2015- 2020, approved by EPA in September 2015, identifies He'eia as a priority watershed. The plan establishes a goal for the state to eliminate the sediment and nutrient water quality impairments in the He'eia stream by 2020.

As a priority watershed, in addition to supporting several on-the-ground restoration projects, the HDOH PRC program has also committed to monitoring He'eia stream to demonstrate water quality trends over time. The monitoring proposed in the He'eia NERR Draft Management Plan is likely duplicative to the current monitoring efforts being undertaken by HDOH. EPA is concerned that implementation of uncoordinated management plans may result in projects and investments (e.g. monitoring) with cross purposes and/or duplication of efforts.

HDOH PRC has previously funded, and is currently funding, on-the-ground restoration projects in the watershed (under CWA section 319) including stream bank restoration and invasive species removal (including mangroves near the stream mouth / fish pond). HDOH also conducts regular water quality sampling at several long term sites in the He'eia stream, including the mouth of the stream at the fishpond.

Recommendations: We recommend NOAA identify the Hawai'i Department of Health Polluted Runoff Control Program as a key stakeholder and partner in the NERR Draft Management Plan to ensure federal and state investments are not duplicative or in conflict.

We also encourage coordination between all watershed health stakeholders moving forward and recommend that this coordination be identified as a goal in the FEIS. This will ensure the NERR leverages existing efforts rather than duplicates efforts already supported by federal funding.

Climate Change

The DEIS does not contain estimates of the greenhouse gas emissions (GHG) that would be caused by the alternatives considered. Consistent with Council on Environmental Quality's (CEQ) Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (CEQ Guidance), the EPA recommends that the FEIS estimate the direct and indirect GHG emissions that would be caused by the

proposal and its alternatives.^[1] Examples of tools for estimating and quantifying GHG emissions can be found on CEQ's website.^[2] Estimated GHG emissions levels can serve as a basis of comparison for climate change impacts among alternatives and appropriate mitigation measures.

The DEIS does not estimate GHG emissions that would be caused by the proposed land management actions and changes in vegetative community type, such as impacts on carbon sequestration from conversion of wetlands. As recommended by the CEQ Guidance, "agencies should include a comparison of estimated net GHG emissions and carbon stock changes that are projected to occur."^[3] EPA recommends quantifying the GHG emissions caused by these changes.

Also, consistent with the CEQ guidance, we recommend that the FEIS include future climate scenarios, such as those provided by the U.S. Global Change Research Program's National Climate Assessment^[4], and how they may impact the proposal and its potential impacts. Including future climate scenarios provides valuable information to determine whether the proposal includes appropriate resilience and preparedness measures for the impacts of climate change. The EPA recommends that the He'eia National Estuarine Research Reserve management plan incorporate measures to improve resiliency to climate change, where appropriate.

Specifically, the FEIS would benefit from an analysis of the effects that climate change may have on the adaptability of specific species to thrive. For example, consider the increased vulnerability of specific species under a reasonably anticipated climate change scenario. EPA recommends NOAA include a diversity strategy in any wetland restoration/conversion plans to increase the chances of species adaptation to climate change and survival of a healthy watershed.

Recommendations: In the FEIS, include a climate analysis that is consistent with the CEQ guidance. In the climate analysis consider how climate change would potentially affect the project area, specifically within sensitive species areas, and assess how the projected impacts of the project could be exacerbated by climate change.

Additionally, we recommend the climate change analysis include how climate change could affect taro cultivation and determine which wetland, (current or proposed), is better able to adapt to the effects of climate change. When considering adaptation to climate change, we recommend that the FEIS discuss measures that would improve both adaptability and overall wetland health in the project area, such as diversifying the land cover with the selection of certain adaptive species for replanting in addition to taro.

^[1] White House Council on Environmental Quality, *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews*, p.11, p. 16.

^[2] https://ceq.doe.gov/current_developments/GHG-accounting-tools.html

^[3] CEQ Guidance, p. 26.

^[4] <http://nca2014.globalchange.gov/>